Marked-up Substitute Abstract
U.S. Serial No. 10/522 647

Abstract

~~Solid drill bit for machine tools~~

~~The invention relates to a~~A solid drill bit for machine tools~~.~~ ~~The solid drill bit~~ has a drill bit body ~~(10)~~ and two indexable inserts ~~(20, 22) which are~~ arranged at a radial distance from one another in ~~a~~ respective insert ~~seat (16, 18) of the drill bit body (10) in the region of a chip flute (12, 14)~~ seats. The ~~indexable~~ inserts ~~(20, 22)~~ have an essentially quadratic contour. ~~They project with their~~ Their front-end main cutting edges ~~(30, 34)~~project axially beyond the drill bit body ~~(10)~~ and radially overlap one another ~~radially in their active region~~. The ~~radially~~ outer ~~indexable~~ insert ~~(22), with its outer insert corner (36) and with its adjoining~~ has an outer insert corner and a secondary cutting ~~edges (38)~~ edge perpendicular to the ~~relevant~~ main cutting edge ~~(34),~~that projects radially beyond the circumference of the drill bit body. ~~In order to~~ To permit burr-free through-drilling, the ~~front end~~ main cutting edge ~~(34)~~ of the outer insert ~~(22)~~ is subdivided in its longitudinal extent into a radially inner working section ~~(50)~~ and a rectilinear peeling section ~~(52)~~ adjoining ~~said~~the working section ~~(50) on the outside~~ and extending ~~up~~ to the outer insert corner. The ~~(36), said~~sections ~~(50 and 52) enclosing~~enclose a setting angle of 95° to 120° ~~with one another. In the fitted state, the~~. The peeling section ~~(52), toward the outer insert corner (36),~~ is ~~accordingly~~ set at a positive setting angle of 72° to 87° ~~relative to the end face of the drill bit body~~.

~~(Fig. 3)~~